

Element Performance Inspection (EPI) Data Collection Tool

3.1.7 De-Icing Program (OP)

ELEMENT SUMMARY INFORMATION

Purpose of this Element (certificate holder's responsibility):

- To ensure that the certificate holder's De-Icing process prevents an aircraft from taking off with frost, ice, or snow adhering to the wings, control surfaces, propellers, engine inlets, or other critical surfaces of the aircraft.

Objective (FAA oversight):

- To determine the effectiveness of the certificate holder's procedures in meeting the desired output of the process.
- To determine if the certificate holder follows its procedures, controls, process measurements, and interfaces for the De-Icing process.
- To determine if there were any changes in the personnel identified by the certificate holder as having responsibility and/or authority for the De-Icing process.

Specific Instructions:

- When answering questions in the Performance Observables section of this EPI, review the certificate holder's aircraft maintenance logbook entries, ASAP reports, or other company reports for discrepancies that would indicate improper de-icing of its aircraft.

Related EPIs:

- 3.1.3 Airmen Duties / Flight Deck Procedures (OP)
- 3.2.1 Dispatch / Flight Release (OP)
- 5.1.5 Station Facilities (OP)

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:
 - 119.43(b)
 - 119.43(b)(1)
 - 119.43(b)(2)
 - 119.43(c)
 - 121.135(a)(1)
 - 121.135(b)(1)
 - 121.135(b)(2)
 - 121.135(b)(3)
 - 121.629
 - 121.629(a)
 - 121.629(b)
 - 121.629(c)
 - 121.629(c)(1)(i)
 - 121.629(c)(1)(ii)
 - 121.629(c)(1)(iii)
 - 121.629(c)(1)(iv)
 - 121.629(c)(2)

- SRRs:
 - 121.629(c)(2)(i)
 - 121.629(c)(2)(ii)
 - 121.629(c)(2)(iii)
 - 121.629(c)(2)(iv)
 - 121.629(c)(2)(v)
 - 121.629(c)(2)(vi)
 - 121.629(c)(2)(vii)
 - 121.629(c)(3)
 - 121.629(c)(3)(i)
 - 121.629(c)(3)(ii)
 - 121.629(c)(3)(iii)
 - 121.629(c)(4)
 - 121.629(d)
 - A.023

Related CFRs & FAA Policy/Guidance:

- Related CFRs:
 - Intentionally left blank
- FAA Policy/Guidance:
 - FAA Order 8900.1, Volume 3, Chapter 27
 - AC 120-58
 - AC 120-60B
 - AC 120-89
 - N 8900.19
 - N 8900.22
 - N 8900.26

EPI Section 1 - Performance Observables

Objective: The tasks and questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder follows its written procedures and controls and meets the established performance measures of the process. To accomplish this, questions have been generated to test both the outputs of the process as well as the process itself. Question 1 and its following subquestions are directed at the output(s) of the process, whereas questions 2-6, when answered, should be directed at the process itself.

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the information listed in the Supplemental Information section of this DCT.
2.	Review the certificate holder's policies, procedures, instructions, and information for the De-Icing process.
3.	Review the last accomplished associated safety attribute inspection (SAI) for this element with emphasis on the controls, process measurements, and interface attribute section responses.
4.	Observe the De-Icing process to gain an understanding of the procedures, instructions, and information.
5.	Discuss the De-Icing process with the personnel (other than management) who perform the duties and responsibilities required by the process.

Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Determine whether the following performance measures were met:	
1.1.	<p>Were the certificate holder's aircraft wings, control surfaces, propellers, engine inlets, and other critical surfaces free of frost, ice, and snow at the final checkpoint?</p> <p><i>Related Performance JTIs:</i></p> <ol style="list-style-type: none"> 1. Check at the Certificate Holder's aircraft cockpit that the carrier's pretakeoff check and pretakeoff contamination check (if required) were performed in accordance with the Certificate Holder's procedures. <i>Sources:</i> 121.629(c)(4) 2. If the Certificate Holder operates under 121.629(d), check at the Certificate Holder's aircraft cockpit that an outside the aircraft check is accomplished in accordance with the Certificate Holder's procedures, within 5 minutes prior to beginning takeoff, any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft. <i>Sources:</i> 121.629(d); AC-120-60, Paragraph 11 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.2.	Were aircraft wings, control surfaces, propellers, engine inlets, and other critical surfaces free of frost, ice, and snow at takeoff?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	<p>Were the certificate holder's policies, procedures, instructions, and information for the De-Icing process followed?</p> <p><i>Related Performance JTIs:</i></p> <ol style="list-style-type: none"> 1. Check at the Certificate Holder's ramp that the carrier's aircraft are ground deiced/anti-iced in accordance with the Certificate Holder's approved ground deicing/anti-icing procedures. 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	<p><i>Sources:</i> 121.629(c)</p> <p>2. Check at the Certificate Holder's training center or specified location that the carrier's effected personnel were trained and/or qualified in accordance with the Certificate Holder's procedures.</p> <p><i>Sources:</i> 121.629(c)(2)(i); 121.629(c)(2)(ii); 121.629(c)(2)(iii); 121.629(c)(2)(iv); 121.629(c)(2)(v); 121.629(c)(2)(vi); 121.629(c)(2)(vii)</p> <p>3. Check at the Certificate Holder's aircraft cockpit that the carrier's holdover timetables were utilized in accordance with the Certificate Holder's procedures.</p> <p><i>Sources:</i> 121.629(c)(3); 121.629(c)(3)(i); 121.629(c)(3)(ii); 121.629(c)(3)(iii); FSAT XX-XX</p>	
3.	Were the De-Icing process controls followed?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	Did the records for the De-Icing process comply with the instructions provided by the certificate holder?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	Were the process measurements for the De-Icing process effective in identifying problems or potential problems and providing corrective action for them?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
6.	Did personnel properly handle the associated interfaces by complying with other written policies, procedures, instructions, and information that are related to this element?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

EPI Section 1 - Performance Observables Drop-Down Menu	
1.	Personnel.
2.	Tools and Equipment.
3.	Technical Data.
4.	Procedures, policies or instructions or information.
5.	Materials.
6.	Facilities.
7.	Controls.
8.	Process Measures.
9.	Interfaces.
10.	Desired Outcome.
11.	Other.

EPI Section 2 - Management Responsibility & Authority Observables

Objective: The questions in this section address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
	NOTE: If no personnel or major program changes (as defined by the principal inspector (PI)) affecting the responsibility or authority attributes for this element have occurred since the last SAI and/or EPI was accomplished, then do not perform tasks 3–6, below. Answer questions 1 and 2, below, and provide the name/title.
1.	Identify the person who has overall responsibility for the De-Icing process.
2.	Identify the person who has overall authority for the De-Icing process.
3.	Review the duties and responsibilities for the person(s) who manage the De-Icing process.
4.	Review the appropriate organizational chart.
5.	Discuss the De-Icing process with the management personnel identified in tasks 1 and 2.
6.	Evaluate the qualifications and work experience of the management personnel identified in tasks 1 and 2

Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Is there a clearly identified person who is responsible for the quality of the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
2.	Is there a clearly identified person who has authority to establish and modify the certificate holder's policies, procedures, instructions, and information for the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
3.	Does the responsible person know that he/she has responsibility for the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
4.	Does the person with authority know that he/she has authority for the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
5.	Does the person with responsibility for the De-Icing process meet the qualification standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
6.	Does the person with authority to establish and modify the De-Icing process meet the qualification standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
7.	Does the person with responsibility understand the controls, process measurements, and interfaces associated with the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

		<input type="checkbox"/> No Change
8.	Does the person with authority understand the controls, process measurements, and interfaces associated with the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
9.	Does the responsible person know who has authority to establish and modify the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
10.	Does the individual with authority know who has the responsibility for the De-Icing process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change

EPI Section 2 - Management Responsibility & Authority Observables Drop-Down Menu	
1.	Assignment of responsibility.
2.	Assignment of authority.
3.	Does not understand procedures, policies or instructions and information.
4.	Does not understand controls.
5.	Does not understand process measurements.
6.	Does not understand interfaces.
7.	Span of control.
8.	Position vacant.
9.	Other.